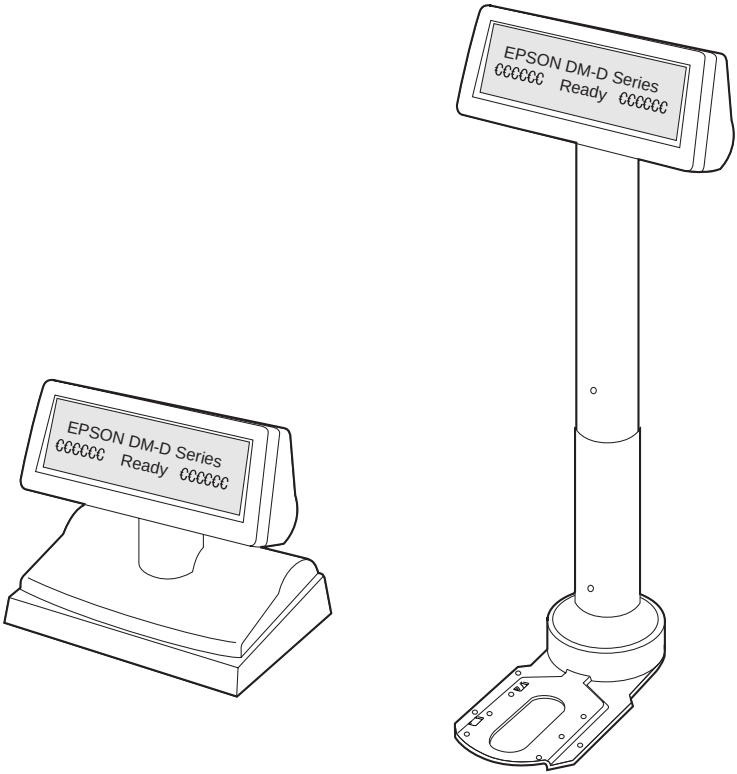
English



Customer Display

DM-D110-xx2 USB I/F

User's Manual

404930300

CAUTIONS

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EMC and Safety Standards Applied

Product Name: DM-D110

Type Name: M58DC

The following standards are applied only to the display that is so labeled.

❑	Europe:	CE Marking Safety: EN60950
❑	North America:	EMI: FCC/ICES-003 Class A Safety: UL 60950/CSA C22.2 No.60950
❑	Japan:	EMI: VCCI Class A
❑	Oceania:	EMC: AS/NZS 3548 (CISPR22) Class B

CE Marking

The display conforms to the following Directies and Norms

Directive 89/336/EEC

EN55022 Class B

EN55024

- IEC 61000-4-2
- IEC 61000-4-3
- IEC 61000-4-4
- IEC 61000-4-5
- IEC 61000-4-6
- IEC 61000-4-11

WARNING

You are cautioned that changes or modifications not expressly approved by SEIKO EPSON Corporation could void your authority to operate the equipment.

FCC COMPLIANCE STATEMENT FOR AMERICAN USERS

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FOR CANADIAN USERS

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Important Safety Instructions

This section presents important information intended to ensure safe and effective use of this product. Read this section carefully, and store it in an accessible location.

Key to Symbols

The symbols in this manual are identified by their level of importance, as defined below. Read the following carefully before handling the product.

⚠ *WARNING:*

Warnings must be followed carefully to avoid serious bodily injury.

⚠ *CAUTION:*

Cautions must be observed to avoid minor injury to yourself or damage to your equipment.

✎ ***Note:***
Notes have important information and useful tips on the operation of your equipment.

Safety Precautions

⚠ ***WARNING:***

- ❏ *Shut down your equipment immediately if it produces smoke, a strange odor, or unusual noise. Continued use may lead to fire or electric shock. Immediately pull out the connection cable to the computer and contact your DM-D110 dealer or a SEIKO EPSON service center for advice.*
- ❏ *Never attempt to repair this product yourself. Improper repair work can be dangerous. Tampering with this product may result in injury, fire, or electric shock.*
- ❏ *Do not allow foreign matter to fall into the equipment. Penetration of foreign objects may lead to fire or shock.*

- *If water or other liquid spills into this equipment, immediately pull out the connection cable to the computer and contact your DM-D110 dealer or a SEIKO EPSON service center for advice. Continued usage may lead to fire or shock.*

⚠ *CAUTION:*

- *Do not plug the cable differently from the instruction in this manual. Wrong connection may cause equipment damage and fire.*
- *Be sure to set this equipment on a firm, stable, horizontal surface. Product may be damaged or cause injury if it falls.*
- *Do not use in locations subject to high humidity or dust levels. Excessive humidity and dust may cause equipment damage, fire, or shock.*
- *Do not place heavy objects on top of this product. Equipment may be damaged and cause injury if it falls.*
- *Do not attach more than one extension support. Product may be damaged or cause injury if it falls.*
- *A stopper limits the horizontal rotation of the display. Do not try to force it to turn beyond the limits of the stopper. Doing so may damage the equipment.*
- *When attaching the DM-D110 to an EPSON TM printer, attach it securely. Also, when the printer has a USB connector, do not connect the DM-D110 to the USB connection of the TM printer to avoid exceeding the power capacity.*
- *Wait at least 3 seconds between disconnecting and reconnecting the USB cable.*
- *Don't connect or disconnect the DM-D110 when the computer is in the power management state, while it is switching over to the power management state, or while it is returning from the power management state.*
- *When using a USB hub, first connect the USB hub to the computer and then connect the connector of the DM-D110 to the connector of the USB hub. Set the USB hub to the condition (the self power mode) which can supply 500 mA electric current to the equipment.*

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English

Handling Guidelines

The DM-D110 is a compact customer display. The DM-D110-xx2 is the USB I/F specification and can connect with a USB port of a personal computer.

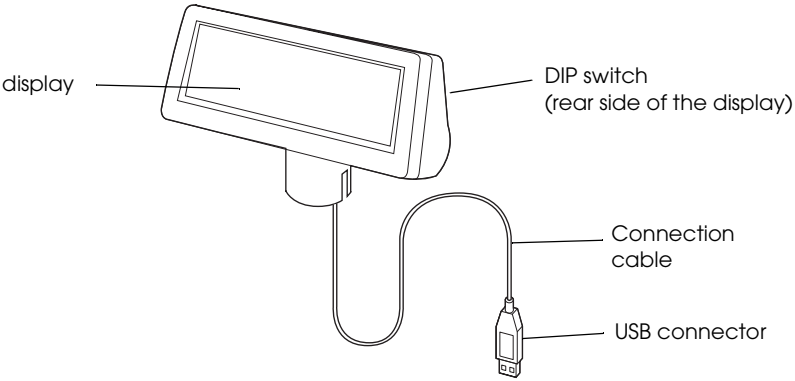
The characteristics of the DM-D110-xx2 are shown below.

- ❏ Interface is USB I/F
- ❏ Supports Window XP and Windows 2000. *1
- ❏ Design matches EPSON TM printers and IM series.
- ❏ Possible to set up the "DM-Dstand" or attach the unit to an EPSON TM printer with any installation option, such as the extension pole.
- ❏ Dot matrix display with 20 column x 2 lines.
- ❏ Vacuum fluorescent display provides a wide viewing angle, long life, high reliability, and high display quality.
- ❏ Green fluorescent color is easy on the eyes.
- ❏ Brightness can be adjusted. *2
- ❏ Control is based on the EPSON ESC/POS standard command set.
- ❏ Supported by OPOS, APD.

*1 The "USB RS-232 convert driver" is necessary for using the USB I/F. The driver is not included, so you must download it. (See page 7.) This driver is Windows XP and Windows 2000 compliant. When using a USB hub, use a hub of the self-power type (with an AC adapter). You cannot use a hub of the bus-power type (without an AC adapter).

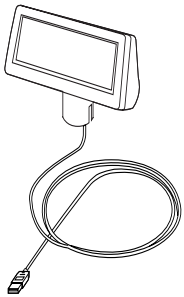
*2 The initial setting is the brightest setting, but the brightness can be adjusted by a command or memory switch. See your dealer for details.

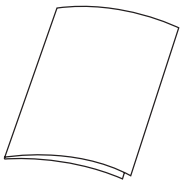
Part Names



Unpacking

The following items are in the box.

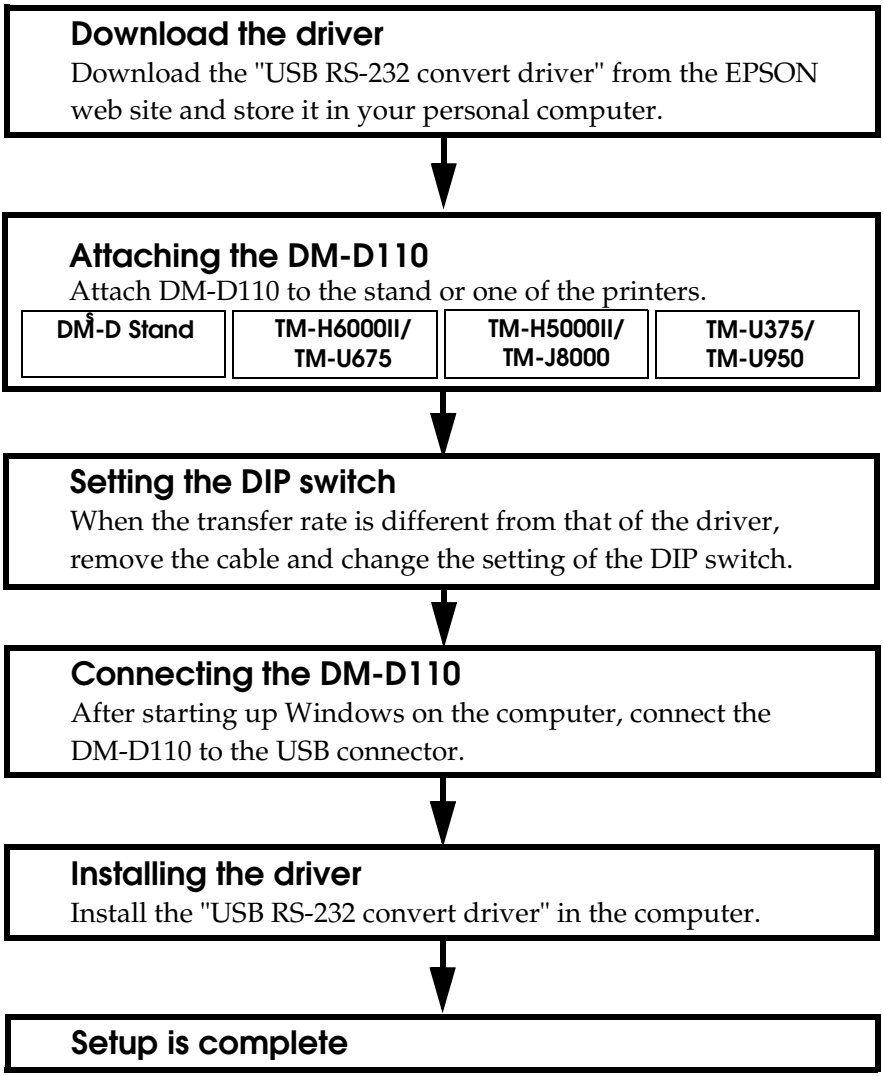

DM-D110


installation manual

Make sure that you have all the items shown above, and that none has been damaged. If you find that there are any missing or damaged items, please contact your DM-D110 dealer.

Setup

The setup of the DM-D110 follows these steps.


Download the driver
Download the "USB RS-232 convert driver" from the EPSON web site and store it in your personal computer.
Attaching the DM-D110
Attach DM-D110 to the stand or one of the printers.
DM-D Stand
TM-H6000II/ TM-U675
TM-H5000II/ TM-J8000
TM-U375/ TM-U950
Setting the DIP switch
When the transfer rate is different from that of the driver, remove the cable and change the setting of the DIP switch.
Connecting the DM-D110
After starting up Windows on the computer, connect the DM-D110 to the USB connector.
Installing the driver
Install the "USB RS-232 convert driver" in the computer.
Setup is complete

Downloading the driver

The "USB RS-232 convert driver" is necessary to use the DM-D110-xx2 USB I/F. This can be obtained from one of the following URLs.

http://www.epson-pos.com/ (Japan, Europe, and other countries not listed below)
http://pos.epson.com/ (USA/Canada and North America)

Create a folder on the computer and store the downloaded driver.

This driver must be installed to all computers which use USB I/F.

This driver supports Window XP and Windows 2000.

Usage

The DM-D110 can be used with the following equipment.

- **DM-D stand**. You can attach the DM-D110 to the DM-D stand directly using the "DM-D stand unit for DM Customer Display" (DP-110). Also, if you want to extend the height of the DM-D110, an optional extension pole unit (DP-105) is required. (See page 8.)
- **TM-H6000II/TM-U675**. You can attach the DM-D110 to TM-H6000II/TM-U675 printers using the "DM-D pole unit for TM printers (Type A)" (DP-502). (See page 10.)
- **TM-H5000II/TM-J8000 printers**. You can attach the DM-D110 to TM-H5000II/TM-J8000 printers using the "DM-D pole unit for TM printers (Type B)" (DP-503). (See page 15.)
- **TM-U375/TM-U950**. You can attach the DM-D110 to the TM-U375/ TM-U950 printers using the "DM-D pole unit for TM printers (Type A)" (DP-502). (See page 17.)
- **Other TM printers**. You can attach the DM-D110 using the "DM-D pole unit for TM printers (Type A)" (DP-502) and Velcro tapes or screws. (See page 20.)

Cautions on Handling

When you use the DM-D110, be sure to note the following points:

- ❏ Avoid locations that are subject to high temperature and humidity.
- ❏ Avoid dirty and dusty locations.
- ❏ Avoid locations that are unstable or are subject to high levels of vibration.
- ❏ Do not drop the DM-D110 because you may damage the built-in vacuum fluorescent display.

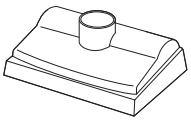
Attaching to the DM-D stand

The DM-D110 can be attached directly to the DM-D stand using the "DM-D stand unit for DM Customer Display" (DP-110). The USB connector of the DM-D110 is connected to the USB port of the computer.

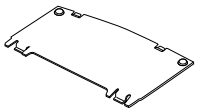
Required items

The following items are used to attach the DM-D110 to the DM-D stand. If you want to extend the length of the DM-D110. You must get the items separately from the DM-D stand unit (DP-110).

<DM-D stand unit for DM Customer Display (DP-110)>

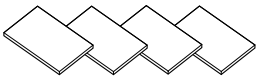


DM-D stand

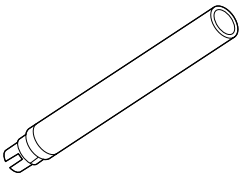


interface
connector base

<extension pole unit (DP-105)>



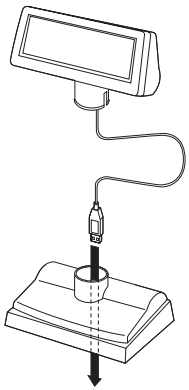
Velcro tapes

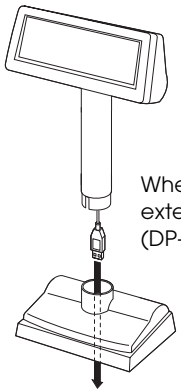


extension support

Assembling steps

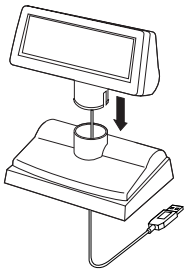
1. Pass the cable for the DM-D110 through the DM-D stand.
   When extending the length of the DM-D stand, attach the extension pole unit(DP-105) to the DM-D stand.



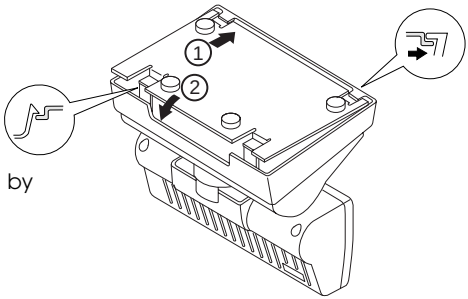


When using the extension pole unit (DP-105)

2. Insert the tab on the DM-D110 (or the extension pole) into the hole on the DM-D stand until you feel it click.

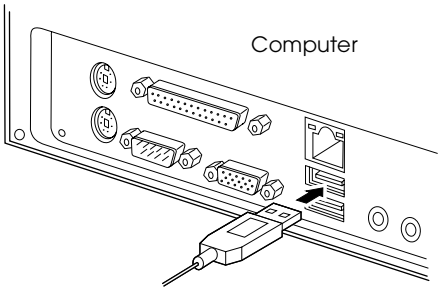


3. Attach the base plate to the DM-D stand following the number of the arrow shown below. At this time, push the base plate until it is locked by the hook on the DM-D stand.



The plate is locked by the hook.

4. Connect the USB connector of the DM-D110 to the USB port of the computer.



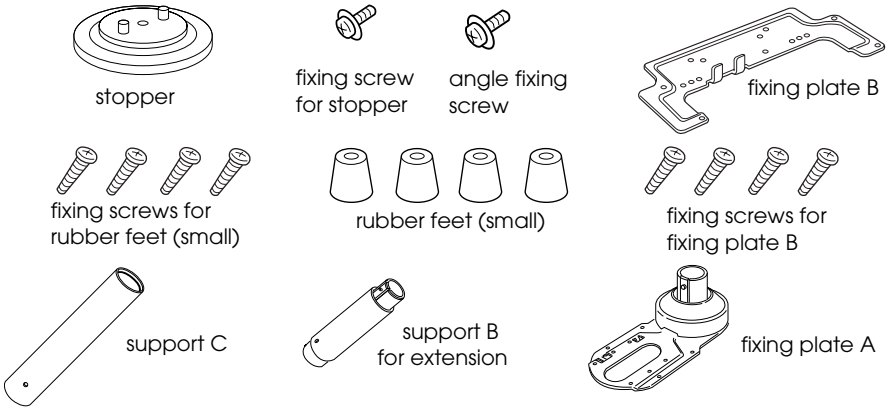
5. Arrange the cables. Put the cables for the DM-D110 inside the DM-D stand.
6. When the extension pole unit (DP-105) is used, attach Velcro tapes to the four corners of the plate to keep the unit from falling down.

Attaching to the TM-H6000II/TM-U675

The DM-D110 can be attached directly to TM-H6000II/TM-U675 printers using the "DM-D pole unit for TM printers (Type A)" (DP-502). You can attach fixing plate A on either side of the TM-H6000II/TM-U675. After attaching it, you can slide the display freely. The USB connector of the DM-D110 is connected to the USB port of the computer.

Required items

The items shown below are used to attach the DM-D110 to the TM-H6000II/TM-U675 printers. These items are packed with the "DM-D pole unit for TM printers (Type A)" (DP-502).

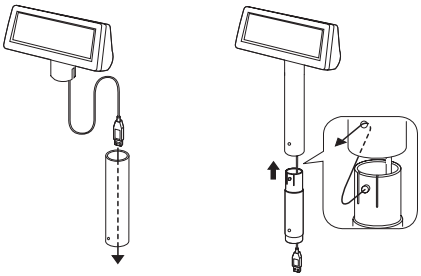


⚠ *CAUTION:*

Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

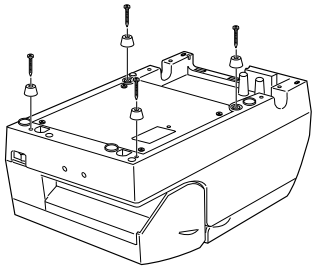
Assembling steps

1. Pass the cable for the DM-D110 through support C, and attach support C to the DM-D110.
   When using support B for extension, insert the tab on support B into the hole on support C until you feel it click.

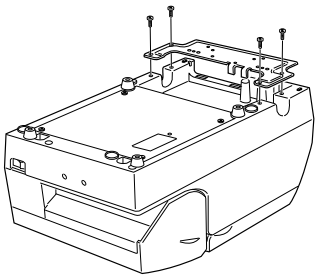


When using support B for extension

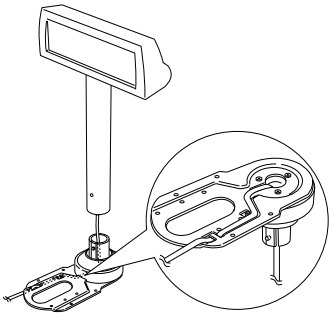
2. Attach the rubber feet to the printer.



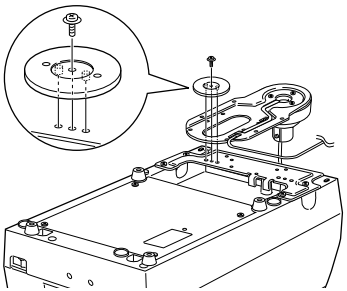
3. Attach fixing plate B to the printer.



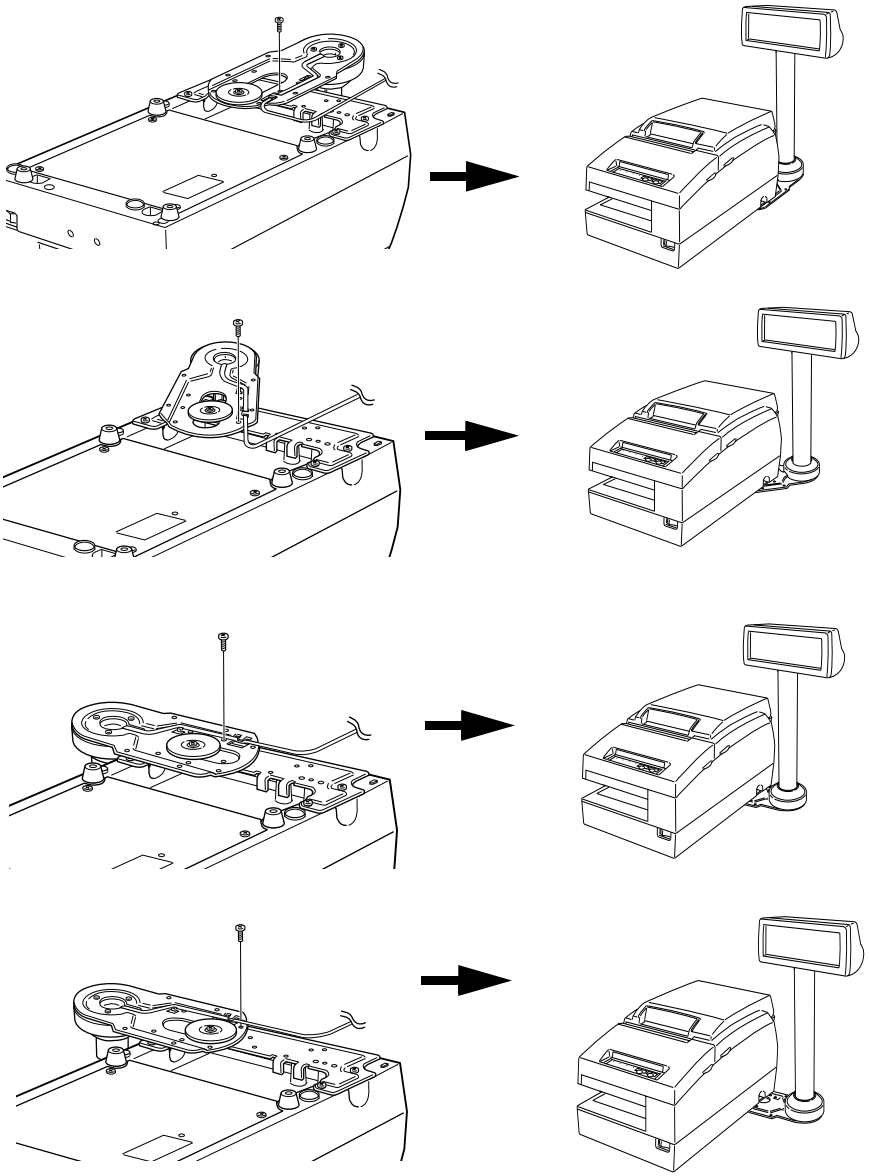
4. Pass the cable for the DM-D110 through the hole on fixing plate A, and fix the cable at the bottom as shown below.



5. Attach fixing plate A to the TM printer using the stopper. When you attach the stopper, insert the projections on the stopper into the holes of fixing plate B. Fixing plate A can be attached on either side of the printer. (The illustration below shows fixing plate A attached to the right side of the printer.)

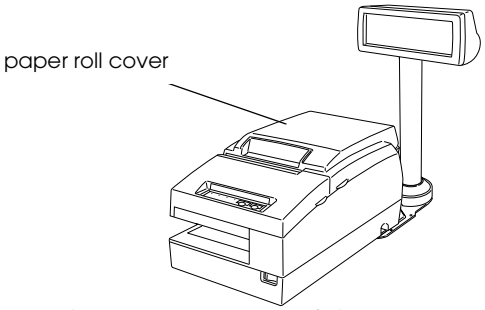


6. The horizontal rotation mechanism of fixing plate A can be adjusted. To secure the location of the display, set fixing plate A to one of the following four positions and secure it with the angle fixing screw.

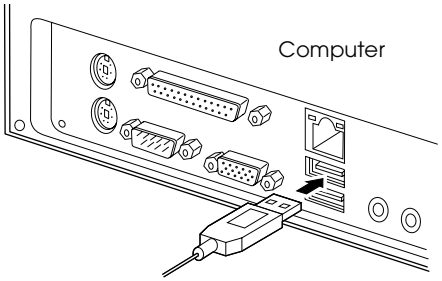


Note:

The paper roll cover may not open if the position of the display is inappropriate. Before securing the position of the display, make sure that you can open the paper roll cover.



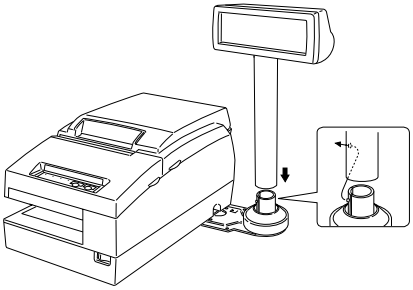
7. Connect the USB connector of the DM-D110 to the USB port of the computer.



⚠ *CAUTION:*

Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

8. Store any excess cable in the support, and attach the DM-D110 to fixing plate A.

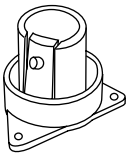


Attaching to the TM-H5000II/TM-J8000

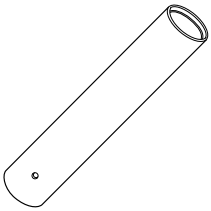
The DM-D110 can be attached directly to the TM-H5000II/TM-J8000 printers using the "DM-D pole unit for TM printers (Type B)" (DP-503). The USB connector of the DM-D110 is connected to the USB port of the computer.

Required items

The following items are used to attach the DM-D110 to the TM-H5000II /TM-J8000 printers. These items are packed with the "DM-D pole unit for TM printers (Type B)" (DP-503).

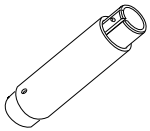


base



support C

fixing screws



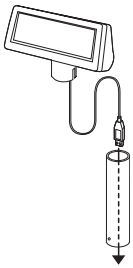
support B
(for extension)

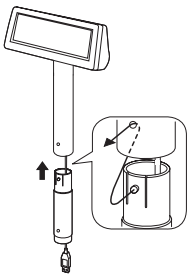
⚠ *CAUTION:*

Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

Assembling steps

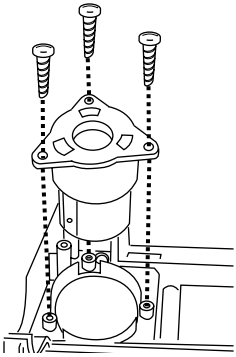
1. Pass the cable for the DM-D110 through support C and attach support C to the DM-D110.
   When using support B for extension, insert the tab on support B into the hole on support C until you feel it click.



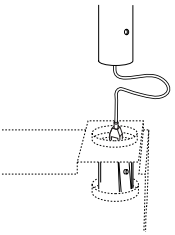


When using support B for extension

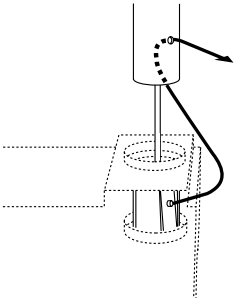
2. Attach the base to the setting position on the TM printer and secure it with the screws.



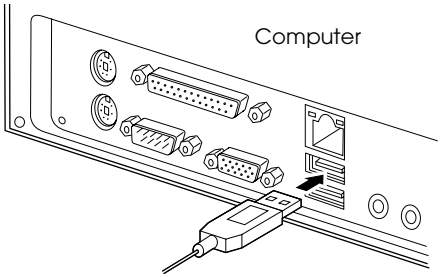
3. Pass the cable for the DM-D110 through the base.



4. Insert the tab on the base into the hole on the support until you feel it click.



5. Connect the USB connector of the DM-D110 to the USB port of the computer.



⚠ *CAUTION:*

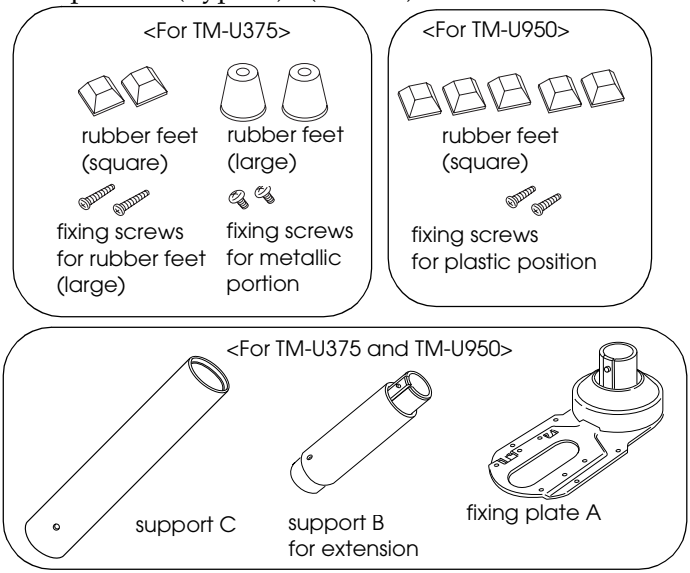
Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

Attaching to the TM-U375/TM-U950

The DM-D110 can be attached directly to the TM-U375/TM-U950 printers using the "DM-D pole unit for TM printers (Type A)" (DP-502). The USB connector of the DM-D110 is connected to the USB port of the computer.

Required items

The following items are used to attach the DM-D110 to the TM-U375/TM-U950 printers. These items are packed with the "DM-D pole unit for TM printers (Type A)" (DP-502).

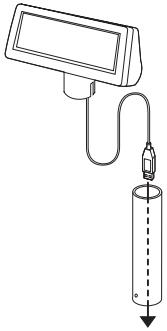


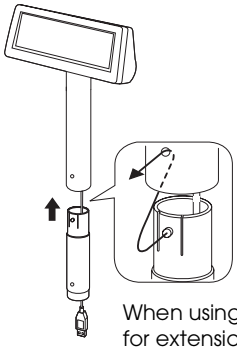
⚠ *CAUTION:*

Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

Assembling steps

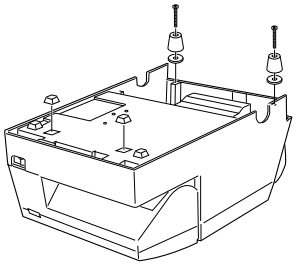
1. Pass the cable for the DM-D110 through support C and attach support C to the DM-D110.
   When using support B for extension, insert the tab on support B into the hole on support C until you feel it click.



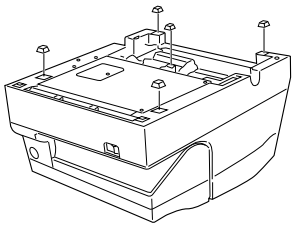


When using support B for extension

2. Attach the rubber feet to the printer.

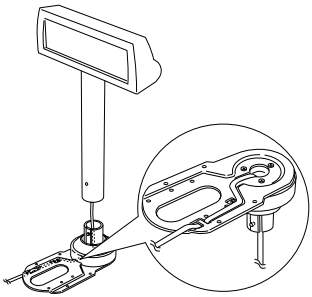


(TM-U375)

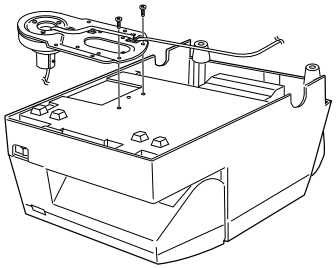


(TM-U950)

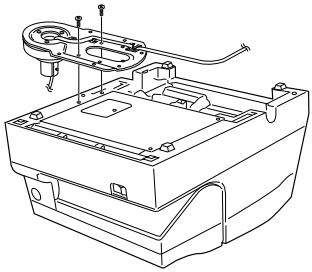
3. Pass the cable for the DM-D110 through the hole on fixing plate A and fix the cable at the bottom as shown below.



4. Attach the secure fixing plate A to the printer with screws.

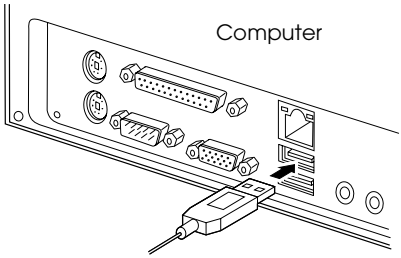


(TM-U375)



(TM-U950)

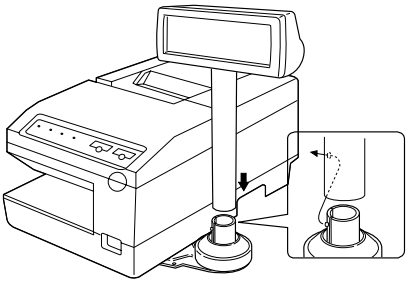
5. Connect the USB connector of the DM-D110 to the USB port of the computer.



⚠ *CAUTION:*

Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

6. Store any excess cable in the support, and attach the DM-D110 to fixing plate A.

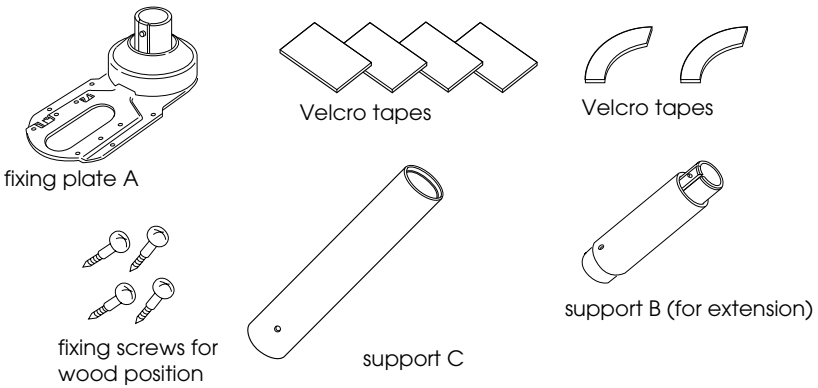


Attaching to Other TM Printers

When using with other TM printers, the DM-D110 can be attached to a desk or other surface, using the "DM-D pole unit for TM printers (Type A)" (DP-502), and Velcro tapes or screws. The USB connector of the DM-D110 is connected to the USB port of the computer.

Required items

The following items are used when the DM-D110 is used with other TM printers. These items are packed with the "DM-D pole unit for TM printers (Type A)" (DP-502).

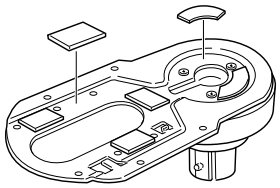


⚠ CAUTION:

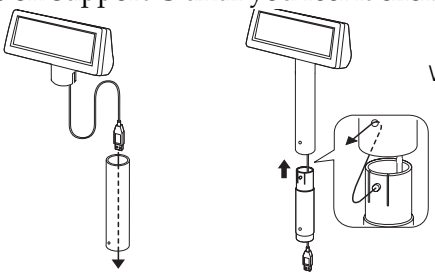
In the case when the TM printer has the USB port, don't connect it with the TM printer.

Assembling steps using Velcro tapes

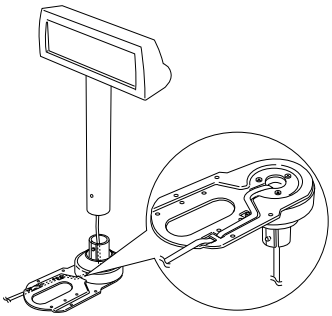
1. Attach Velcro tapes to the bottom of fixing plate A.



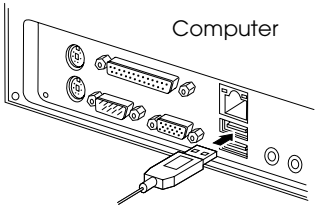
2. Pass the cable for the DM-D110 through support C and attach support C to the DM-D110.
   When using support B for extension, insert the tab on support B into the hole on support C until you feel it click.



3. Pass the cable for the DM-D110 through the hole on fixing plate A, and fix the cable at the bottom as shown below.



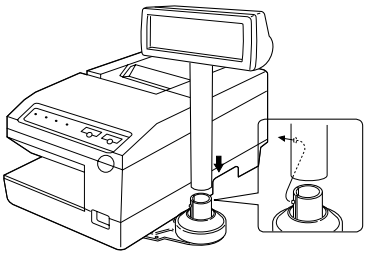
4. Connect the USB connector of the DM-D110 to the USB port of the computer.



⚠ *CAUTION:*

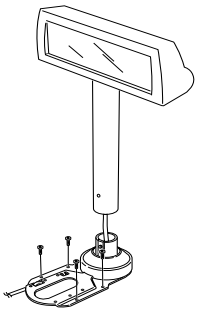
Be sure that you do not connect the cable of the DM-D110 to the USB port of the printer.

5. Store any excess cable in the support, and attach the DM-D110 to fixing plate A.



Assembling steps using screws

1. Follow steps 2 and 3 in "Assembling steps using Velcro tapes."
2. Secure fixing plate A to the setting position with fixing screws.



3. Attach the DM-D110 to fixing plate A.

Installing the driver

The “USB RS-232 convert driver” is necessary to use the DM-D110-xx2 USB I/F. This driver is composed of “USB high Speed Serial Converter” and “USB Serial Port.” Both of them must be installed.

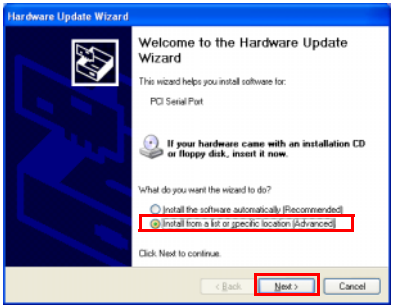
Installing the driver (Windows XP)

1. Confirm that the driver is stored in the appropriate folder of the computer.

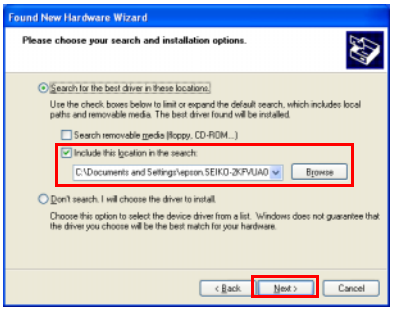
2. Power on the computer and start Windows XP and quit all applications.

3. Connect the DM-D110-xx2 to the USB connector of the computer.

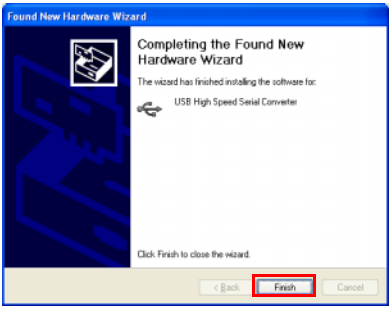
4. First install “USB high Speed Serial Converter”.
   The Setup starts and “Welcome to the Hardware Update Wizard” is displayed. Select [Install from a list or specific location] and click [Next].


Hardware Update Wizard
Welcome to the Hardware Update Wizard
This wizard helps you install software for:
PCI Serial Port
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

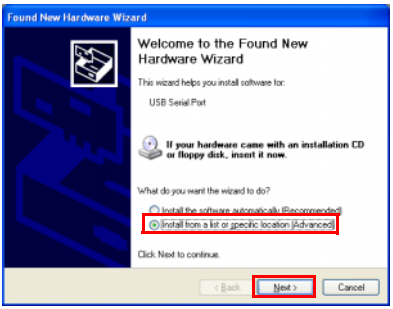
5. “Please choose your search and installation options.“ is displayed. Select [Search for the best driver in these locations] and enter the place where the downloading driver is stored. Click [Next].


Found New Hardware Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
C:\Documents and Settings\epson.SEIKO-ZKPVUA0
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

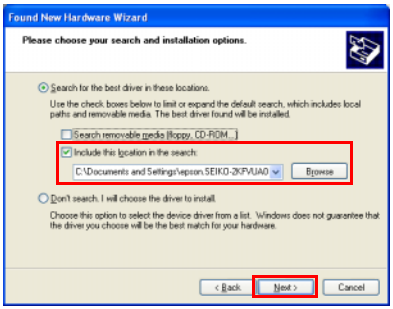
6. “Completing the Found New Hardware Wizard“ is displayed. Click [Finish].


Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
USB High Speed Serial Converter
Click Finish to close the wizard.
< Back
Finish
Cancel

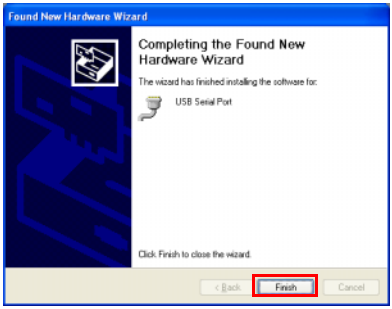
7. Next install “USB Serial Port”.
“Welcome to the Found New Hardware Wizard“ is displayed. Choose [Install from a list of specific location] and click [Next].


Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
USB Serial Port
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

8. “Please choose your search and installation options.“ is displayed.
Select [Search for the best driver in these locations] and enter the place where the downloading driver is stored. Click [Next].


Found New Hardware Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
C:\Documents and Settings\epson.SEIKO-ZKPVUA0
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

9. “Completing the Found New Hardware Wizard“ is displayed. Click [Finish].

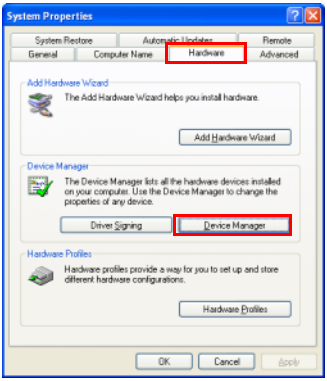


Confirmation of the operation

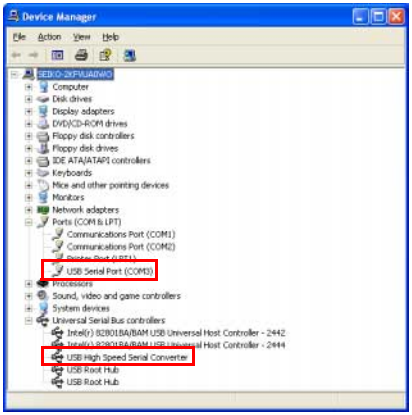
Confirm that the installation was normal.

1. Select [Control Panel] from the Start menu; then double click [System]. On the Hardware tab, click {Device Manager].

2. “System properties” is displayed. Select [Hardware] and click [Device Manager].



3. “Device Manager” is displayed. Confirm that [USB high Speed Serial Converter] and [USB Serial Port] are present.

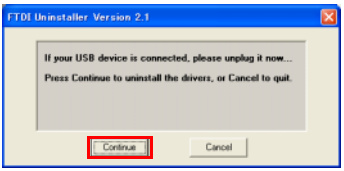


4. Confirm that the cursor is displayed on the display screen of the DM-D110.

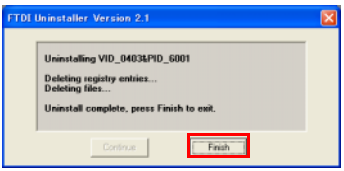
Uninstalling the driver (Windows XP)

The uninstallation process of the “USB RS-232 convert driver” is as follows.

1. Quit all applications and disconnect the DM-D110 from the USB connector.
2. Execute “Ftdiunin.exe.” (In the downloaded and stored folder.)
3. “FTDI Uninstaller Version2.1” is displayed. Click [Continue].


FTDI Uninstaller Version 2.1
If your USB device is connected, please unplug it now...
Press Continue to uninstall the drivers, or Cancel to quit.
Continue
Cancel

4. The following dialog is displayed. Click [Finish].



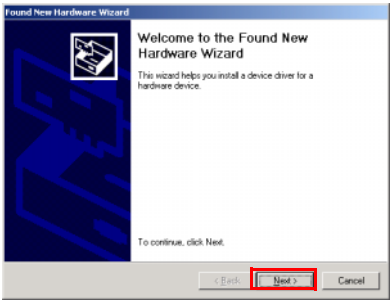
Installing the driver *(Windows 2000)*

1. Confirm that the driver is stored in the appropriate folder of the computer.

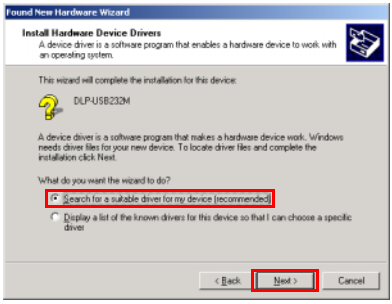
2. Power on the computer and start Windows 2000 and quit all applications.

3. Connect the DM-D110-xx2 to the USB connector of the computer.

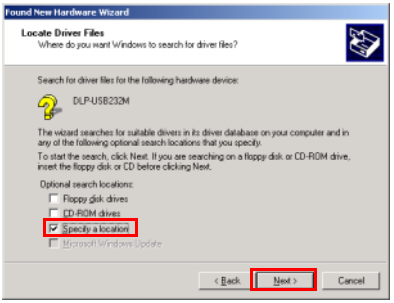
4. First install “USB high Speed Serial Converter”.
   The Setup starts and “Welcome to the Found New Hardware Wizard” is displayed. Click [Next].


Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

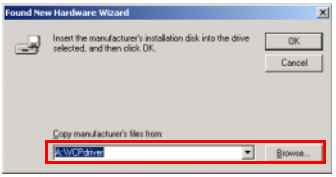
5. “Install Hardware Device Drivers“ is displayed. Choose [Search for a suitable driver for my device] and click [Next].


Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
DLP-USB232M
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device [recommended]
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

6. “Locate Driver Files“ is displayed. Select [Specify a location] and click [Next].


Found New Hardware Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
DLP-USB232M
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back
Next >
Cancel

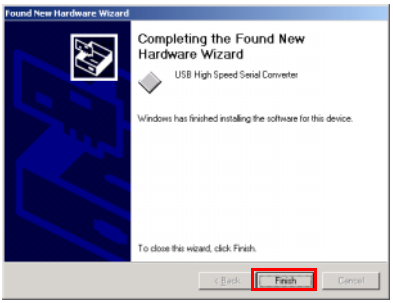
7. The following dialog is displayed. Enter the place where the downloaded driver is stored and click [OK].



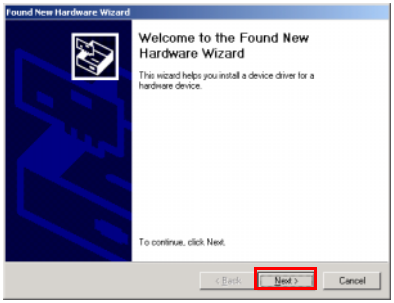
8. “Driver Files Search Results“ is displayed. Click [Next].

Found New Hardware Wizard
Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
USB High Speed Serial Converter
Windows found a driver for this device. To install the driver Windows found, click Next.
a:\vcpdriver\ftdibus.inf
< Back
Next >
Cancel

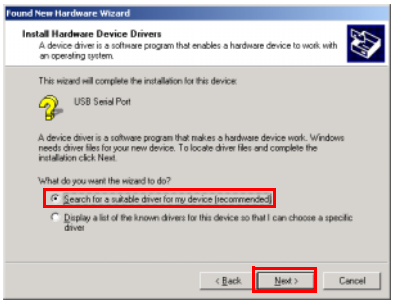
9. “Completing the Found New Hardware Wizard” is displayed. Click [Finish].


Found New Hardware Wizard
Completing the Found New Hardware Wizard
USB High Speed Serial Converter
Windows has finished installing the software for this device.
To close this wizard, click Finish.
< Back
Finish
Cancel

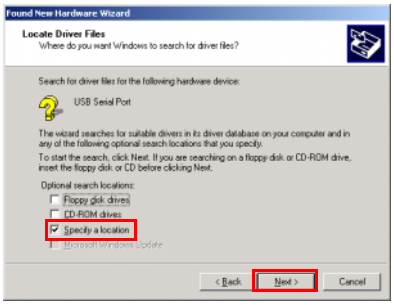
10. Next install “USB Serial Port”.
    The Setup starts and “Welcome to the Found New Hardware Wizard” is displayed. Click [Next].


Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

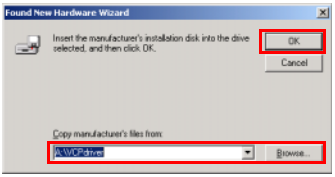
11. “Install Hardware Device Drivers“ is displayed. [Search for a suitable driver for my device] and click [Next].


Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
USB Serial Port
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

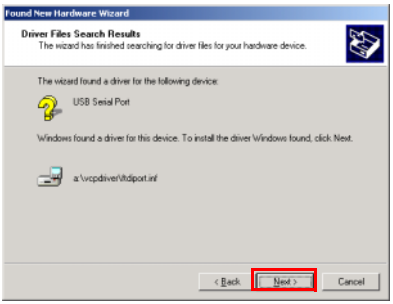
12. “Locate Driver Files“ is displayed. Select [Specify a location] and click [Next].


Found New Hardware Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
USB Serial Port
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back
Next >
Cancel

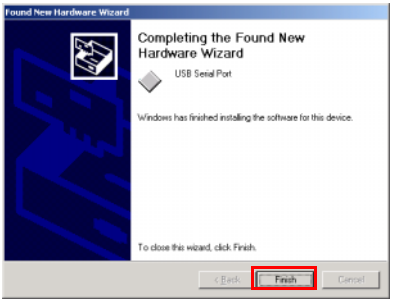
13. The following dialog is displayed. Enter the place where the downloading driver is stored and click [OK].



14. "Driver Files Search Results" is displayed. Click [Next].


Found New Hardware Wizard
Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
USB Serial Port
Windows found a driver for this device. To install the driver Windows found, click Next.
a:\vcpdriver\ftdiport.inf
< Back
Next >
Cancel

15. "Completing the Found New Hardware Wizard" is displayed. Click [Finish].

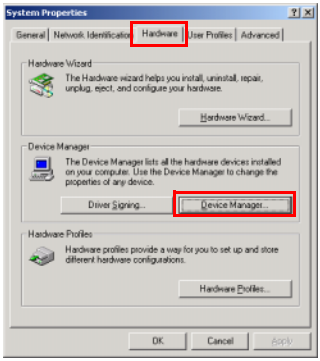

Found New Hardware Wizard
Completing the Found New Hardware Wizard
USB Serial Port
Windows has finished installing the software for this device.
To close this wizard, click Finish.
< Back
Finish
Cancel

Confirming the operation

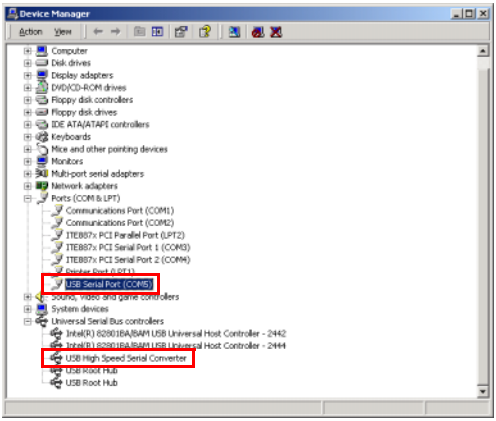
Confirm that the installation was normal.

1. Select [Settings]-[Control Panel]-[System] from the Start menu of Windows.

2. “System Properties“ is displayed. Select [Hardware] and click [Device Manager].


System Properties
General
Network Identification
Hardware
User Profiles
Advanced
Hardware Wizard
The Hardware wizard helps you install, uninstall, repair, unplug, eject, and configure your hardware.
Hardware Wizard...
Device Manager
The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.
Driver Signing...
Device Manager...
Hardware Profiles
Hardware profiles provide a way for you to set up and store different hardware configurations.
Hardware Profiles...
OK
Cancel
Apply

3. “Device Manager” is displayed. Confirm that [USB high Speed Serial Converter] and [USB Serial Port] are present.



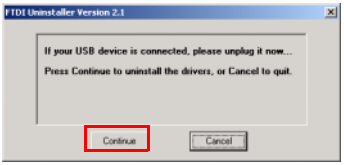
4. Confirm that the cursor is displayed on the display screen of the DM-D110.

Uninstalling the driver (Windows 2000)

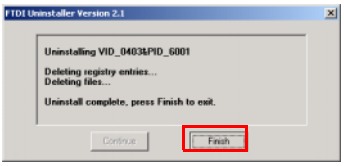
The uninstallation process of the “USB RS-232 convert driver” is as follows.

1. Quit all applications and disconnect the DM-D110 from the USB connector.
2. Execute “Ftdiunin.exe”. (In the downloaded and stored folder.)

3. “FTDI Uninstaller Version2.1” is displayed. Click [Continue].


FTDI Uninstaller Version 2.1
If your USB device is connected, please unplug it now...
Press Continue to uninstall the drivers, or Cancel to quit.
Continue
Cancel

4. The following dialog is displayed. Click [Finish].



DIP Switch

DIP Switch Functions

The DM-D110 has one DIP switch. The functions of the DIP switch are as follows:

DIP switch 1

DSW1 No.	Function	ON	OFF	Default setting
1-1	Data receive error	Ignored	Displays “?”	OFF
1-2	Data length	7 bits	8 bits	OFF
1-3	Parity on or off	Parity	No parity	OFF
1-4	Parity type	Even	Odd	OFF
1-5	Change transmis-sion speed	See “Transmission speed.”		ON
1-6				OFF
1-7				ON
1-8	Self test selection (*)	Perform self test	Do not per-form	OFF

(*)This function can select whether or not the self test is performed when you turn on the power. See “Self Test” for details.

Transmission speed

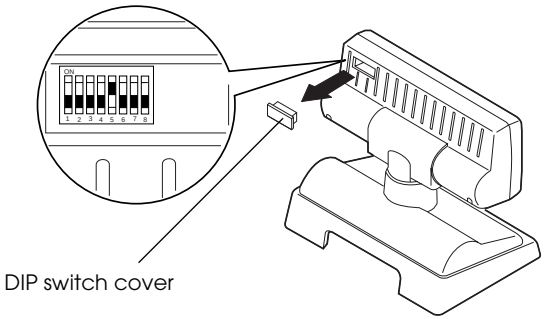
SW1-5	SW1-6	SW1-7	Transmission speed (bps)
ON	ON	ON	2400
OFF	ON	ON	4800
ON	OFF	ON	9600
OFF	OFF	ON	19200
ON	ON	OFF	38400
OFF	ON	OFF	57600
ON	OFF	OFF	115200
OFF	OFF	OFF	reserved

Setting the DIP switches

⚠ *CAUTION:*

Remove the cable of the DM-D110 before removing the DIP switch cover to prevent electrical damage to the DM-D110.

1. Remove the cable of the DM-D110.
2. Remove the DIP switch cover.



3. Change each setting of the switches with a pointed object, such as a pen tip or small screwdriver.
4. Close the cover and connect the cable to computer.

Operation

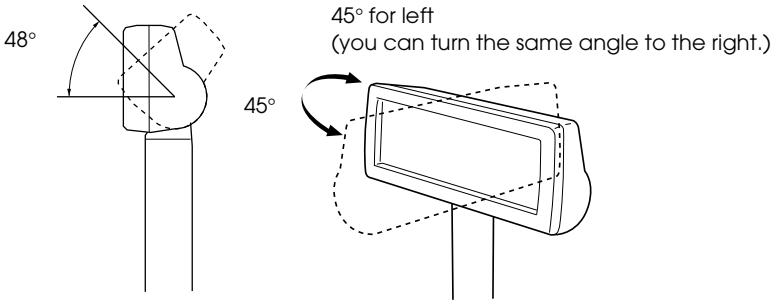
There is no power switch on the DM-D110-xx2. Connect the USB connector to the computer or start the computer to which the DM-D110-xx2 is connected.

When the power is on, the cursor appears on the display.

Turning and tilting the DM-D110

You can turn or tilt the display while holding the support. The display can be moved easily, so do not move any further if it stops. If you move it by force, you may damage it.

With the "DM-D pole unit for TM printers (Type B)" (DP-503), the display area may not face the direction you desire. In this case, remove the base, change the position of the tab of the base so that the display faces to the direction you desire, and reattach it to the base.



The display area has the following range of movement:

- ❏ Tilt: 48° max. (4 steps, 5 positions)
- ❏ Horizontal rotation: 90° max. Attached to the DP-110
  330° max. Attached to the pole unit

Changing the brightness

The brightness is set in the maximum at the factory shipment. The brightness can be adjusted by a command or memory switch. For details, ask your dealer.

Self Test

The DM-D110 has a self test function. If you want to perform a self test, you must change the setting of the DIP switch.

Check Items of Self test

The following items are checked during the self test:

- ❏ Control ROM version
- ❏ DIP switch settings
- ❏ Memory switch settings
- ❏ Example of display characters
- ❏ Example of each function, such as brightness, flashing, and scroll

Performing Self test

To perform the self test, follow the steps below.

1. Set SW 1-8 of the DIP switch to ON, and connect the cable to the computer.

   Note:
   If the contents of the self test are not displayed, the DM-D110 may be malfunctioning. Please contact your DM-D110 dealer for assistance.

When the self test is finished and no error occurs, the DM-D110 is ready to receive data.

Diagnostics

The DM-D110 has a diagnostics function. When the DM-D110 is turned on, diagnostics, such as an internal memory test, are carried out regardless of the DIP switch settings. When an error is detected, an error message is displayed.

Specifications

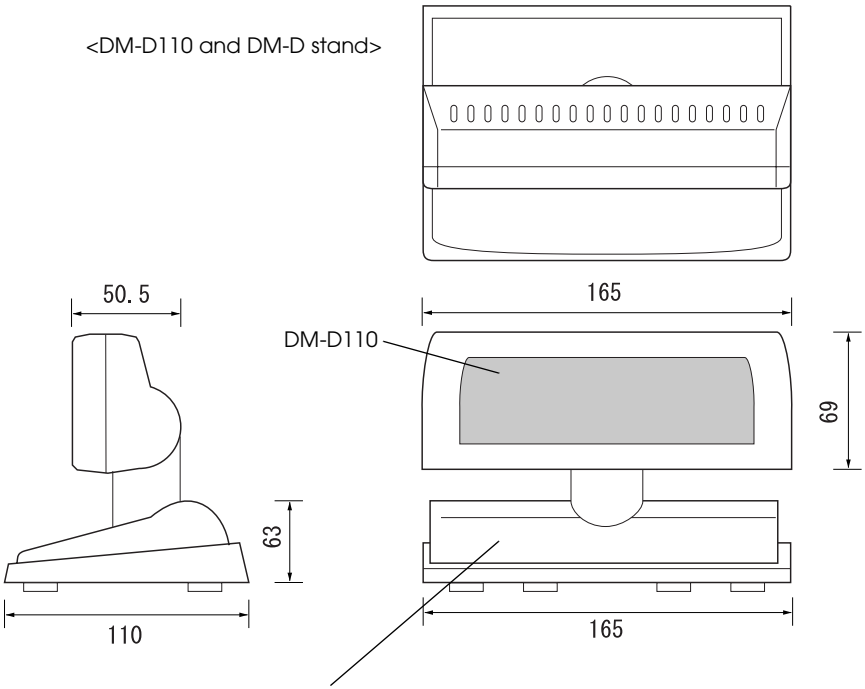
General Specifications

Vacuum fluorescent display	Number of characters		40 (20 columns x 2 lines)
	Display color		Green (505 nm)
	Brightness		690 (cd/m^2)
Character Specifications	Type of character	Alphanumeric characters	95
		International characters	37
		Extended graphics	128 characters x 12 pages
	Character grid	Font	5 x 7 dot matrix, cursor
		Character size	3.5mm x 5.0mm
		Character pitch	5.2mm
Tilt angle			Max 48° (4 steps, 5 positions)
Horizontal rotation	When DP-110 is attached		Max 90° (for each left and right at 45°)
	When the pole unit is attached		Max 330°
Interface			USB 2.0 full-speed mode
Electrical Specifications	Rated voltage		DC +5 V
	Rated current		0.35 A (max)
Environmental Specifications	Operation environment		Temperature : 5 °C to 40 °C Humidity: 30% to 85% (No condensation)
	Storage environment		Temperature : -10 °C to 50 °C Humidity: 30% to 90% (No condensation)
Reliability Specification	MTBF (vacuum fluorescent display only)		20,000 hours (When the brightness is reduced to half)

Dimensions

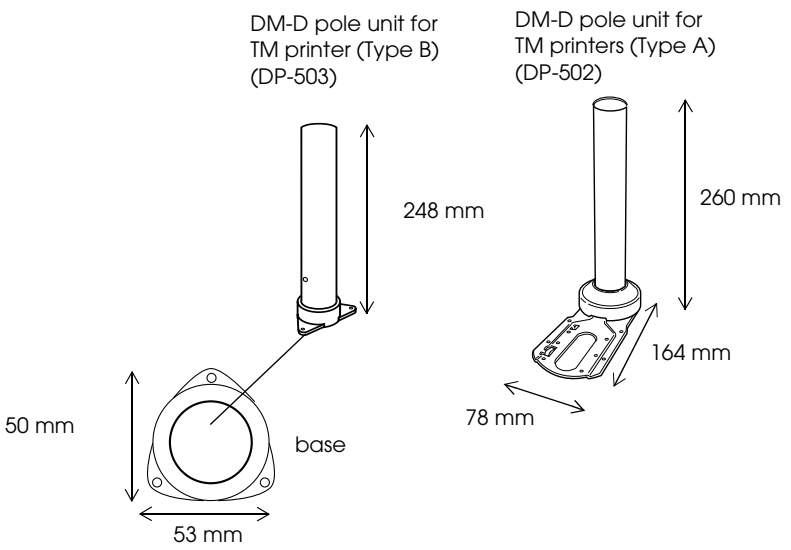
❑ Height, Width, Depth and Weight

<DM-D110 and DM-D stand>



- DM-D110:
  Height x Width x Depth: 69 x 165 x 50.5 mm
  Weight: 285 g
- DM-D stand (DP-501):
  Height x Width x Depth: 63 x 165 x 110 mm
  Weight: 385 g

<DM-D pole units>



- Base and support C of the "DM-D pole unit for TM printers (Type B)" (DP-503):
  Height x Width x Depth: 248 x 50 x 53 mm
  Weight: 116 g
- Fixing plate A and support C of the "DM-D pole unit for TM printers (Type A)" (DP-502):
  Height x Width x Depth: 260 x 78 x 164 mm
  Weight: 264 g